CLAIMS

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- 1. A method for inhibiting osteoclast formation or a method for inhibiting bone resorption which comprises exposing cells to ultrasound in the culture containing an osteoclast precursor and an <u>induing</u> factor of osteoclast formation and /or bone resorption.
- 2. The method for inhibiting osteoclast formation or the method for inhibiting bone resorption according to claim 1 wherein said induing factor comprises at least one factor selected from the group consisting of macrophage colony-stimulating factor, osteoclast differentiating factor, tumor necrosis factor, interleukin-4, and vascular endothelial cell growth factor.
- 3. A method for inhibiting osteoclast formation or a method for inhibiting bone resorption whici comprises exposing cells to ultrasound in the co-culture containing an osteoclast precursor and an supporting cell for osteogenesis.
- 4. The method for inhibiting osteoclast formation or the method for inhibiting bone resorption according to claim 3 wherein said co-culture system comprises at least one cell selected from the group consisting of osteoblast, stroma cell, fibroblast, Tlymphocyte and B-lymphocyte.
 - 5. The method for inhibiting osteoclast formation or the method for inhibiting bone resorption as described in claim 3 or 4 wherein said co-culture comprises an inducing factor of osteoclast formation and/or bone resorption in the co-culture medium.
 - 6. The method for inhibiting osteoclast formation or the method for inhibiting bone resorption according to claim 5 wherein said inducing factor comprises at least one factor selected from the group consisting of macrophage colony-stimulating factor, osteoclast forming factor, tumor necrosis factor, interleukin-1, interleukin-3 interleukin-6, interleukin-11, interleukin-15, interleukin-17, prostaglandins, parathyroid hormone, parathyroid hormone-related peptide, granulocyte macrophage colony stimulating factor, active vitamin D and its derivatives.

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